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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,184	05/14/2007	Hong Cheng	L8638.06115	7759
52989 Dickinson Wrig	7590 09/27/201 ght PLLC	EXAMINER		
James E. Ledbe	etter, Esq.	AJIBADE AKONAI, OLUMIDE		
International Square 1875 Eye Street, N.W., Suite 1200			ART UNIT	PAPER NUMBER
Washington, DC 20006			2617	
			MAIL DATE	DELIVERY MODE
			09/27/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/591,184	CHENG ET AL.
Office Action Summary	Examiner	Art Unit
	OLUMIDE T. AJIBADE AKONAI	2617
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING D. Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed on <u>28 July</u> 2a) This action is FINAL . 2b) This 3) Since this application is in condition for allowal closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro	
Disposition of Claims		
4) Claim(s) <u>1-23,25-27,31 and 32</u> is/are pending 4a) Of the above claim(s) is/are withdray 5) Claim(s) is/are allowed. 6) Claim(s) is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) <u>1-23,25-27,31 and 32</u> are subject to r	wn from consideration.	nent.
Application Papers		
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Example 11.	epted or b) objected to by the I drawing(s) be held in abeyance. See tion is required if the drawing(s) is objected.	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list 	s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da	ate
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>06/28/2010</u> .	5)	ателт Аррисатоп

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DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see pages 12-20 of the remarks, filed June 28, 2010, with respect to Claims 1-31 have been fully considered and are persuasive. All 35 U.S.C. 102(a) and 102(b) rejections have been withdrawn.

Election/Restrictions

- 2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-8, 12-14, 23, 25-27 and 32, drawn to a method and system for providing WLAN function in a wireless local area network WLAN, whereby the WLAN function is split between wireless access points and control nodes in the WLAN, classified in class 370, subclass 338.
 - II. Claims 9-11, drawn to transmitting and receiving of data between wireless communication devices and access points in a wireless local area network, classified in class 455, subclass 41.2.
 - III. Claims 15 and 16, drawn to communication between network devices in a wireless local area network, classified in class 370, subclass 328.
 - IV. Claims 17-22, drawn to a method for carrying out load balancing in a wireless local area network, classified in class 455, subclass 453.
 - V. Claim 31, drawn to a topology determination in a wireless network, classified in class 370, subclass 351.

The inventions are distinct, each from the other because of the following reasons:

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Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the method of negotiating between the control node and the wireless access point in order to determine the functionality to be provided by the control node does not require communication between the mobile terminals and the wireless access points. The subcombination has separate utility such as transmission of data between mobile terminals via a wireless access point in an infrastructure mode of an ad hoc network.

Inventions II and III are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the transmission of data between mobile terminals and the wireless access points and provision of WLAN functionality by the wireless access points to the mobile terminals does not require the control nodes negotiating with each other in other to provide WLAN functions to the wireless access point. The subcombination has separate utility such as providing multiple control nodes to be able to provide WLAN functions to the wireless access point, which provides

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redundancy should a control node currently communicating/negotiating with the wireless access point not have the WLAN function.

Inventions III and IV are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the negotiation between the control nodes regarding WLAN functions to be provided to the wireless access point does not require load balancing in the wireless network. The subcombination has separate utility such as reducing congestion in a wireless local area network.

Inventions IV and V are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the method of carrying out load balancing in the wireless network does not require determining network topology by exchanging neighbor information. The subcombination has separate utility such as determining optimal routing paths based on exchanging neighbor information in the wireless network.

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The examiner has required restriction between combination and subcombination inventions. Where applicant elects a subcombination, and claims thereto are subsequently found allowable, any claim(s) depending from or otherwise requiring all the limitations of the allowable subcombination will be examined for patentability in accordance with 37 CFR 1.104. See MPEP § 821.04(a). Applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

Restriction for examination purposes as indicated is proper because all these inventions listed in this action are independent or distinct for the reasons given above and there would be a serious search and/or examination burden if restriction were not required because at least the following reason(s) apply:

- (a) the inventions have acquired a separate status in the art in view of their different classification;
- (b) the inventions have acquired a separate status in the art due to their recognized divergent subject matter;
- (c) the inventions require a different field of search (for example, searching different classes/subclasses or electronic resources, or employing different search queries);
- (d) the prior art applicable to one invention would not likely be applicable to another invention;

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(e) the inventions are likely to raise different non-prior art issues under 35 U.S.C.101 and/or 35 U.S.C. 112, first paragraph.

Applicant is advised that the reply to this requirement to be complete <u>must</u> include (i) an election of a invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable upon the elected invention.

Should applicant traverse on the ground that the inventions are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

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A telephone call was made to the applicants' representative, James E. Ledbetter on September 21, 2010 to request an oral election to the above restriction requirement, but did not result in an election being made.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to OLUMIDE T. AJIBADE AKONAI whose telephone number is (571)272-6496. The examiner can normally be reached on M-F, 8.30p-5p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on 571-272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Olumide T Ajibade-Akonai/ Examiner, Art Unit 2617